Case study

clearstream GROUP

Clearstream, the established provider of settlement and custody services, is part of the exchange organization Deutsche Börse Group. It offers comprehensive services for both domestic and internationally traded bonds, equities and investment funds.

Serving 2,500 customers in more than 100 countries, it maintains a leading position in the international fixed income market, with over €10 trillion in assets under custody.

Clearstream's quality services are reflected in the positive feedback received from its customers. Again in the 2008 "Agent Banks in Major Markets" survey, conducted by Global Custodian magazine, Clearstream was classified for the fifth consecutive year as a top rated ICSD.

Headquartered in Luxembourg, with operations in Luxembourg and Frankfurt, Clearstream also has offices in Dubai, Hong Kong, London, New York, Singapore and Tokyo.

Clearstream leverages SWIFT and ISO 15022 to support interoperability

International standards ease Clearstream's transition to its new generation processing environment

Benefits for SWIFT user community

Clearstream has shown how ISO 15022 simplifies projects:

- Zero customer migration costs
- Reduced complexity
- Faster time to market
- Reduced project cost

Making the following customer benefits possible:

- Faster settlement turnaround time
- More efficient use of collateral
- Improved asset servicing
- Higher service levels in cross-border settlement

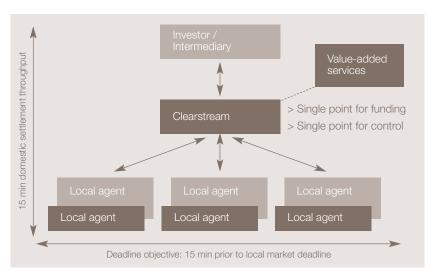
In March 2008, international central securities depository (ICSD) Clearstream launched its new generation processing environment. This combines real-time processing and permanent optimisation features for the complete transaction lifecycle with a strategy of interoperability with local markets.

Clearstream's objective is to leverage interoperability and offer "friction-free" services throughout the full trade life cycle with control of cash and securities maximised at all times. This also includes the elimination of liquidity fragmentation, and a full integration of securities financing and asset servicing.

This new environment positions Clearstream to meet market demand for improved efficiency in cross-border settlement and related services [see box].

By building on its strategic commitment to SWIFT connectivity and ISO standards, Clearstream has realised its interoperability strategy with less complexity, faster time to market and at a lower project cost than would otherwise have been possible. By taking advantage of ISO standards, Clearstream has introduced what it believes is the best possible settlement solution with high service levels, and without imposing any migration costs on its customers.





All the benefits of using local agents combined with the ability to settle in multiple markets worldwide through a single window

The European clearing and settlement landscape

Since before the launch of the euro, Europe's clearing and settlement industry has been working towards a single settlement infrastructure, with the aim of enabling brokers and global custodians to access Europe's capital market as if it were a single, national-like structure.

Historically, laws and standards were always going to be challenging and so an overwhelming number of Big Ideas came all at once: Euroclear's Hub and Spokes Model, CrestCo's spaghetti model and Clearstream's own European Clearing House.

Until recently, many market players supposed that these goals would be achieved only through consolidation and harmonisation. In re-evaluating its strategy in 2005, Clearstream decided that consolidation strategies are subject to structural constraints which limit the level of benefits that they deliver. Clearstream concluded that emerging standards in settlement and custody processing would deliver the benefits of a consolidation strategy by alternative means.

Focusing on the use of standards to achieve true interoperability has been a cornerstone in the development of Clearstream's settlement and custody strategy, just as it has been a core component of the development of Link-Up Markets.

The role of SWIFT and ISO 15022 standards

ISO 15022

Believing that the advent of the ISO 15022 message standards provided a basis for interoperability in an increasingly globalised financial market, Clearstream decided to discontinue proprietary message standards in the late 1990s, and to endorse ISO 15022 message standards for its suite of connectivity products.

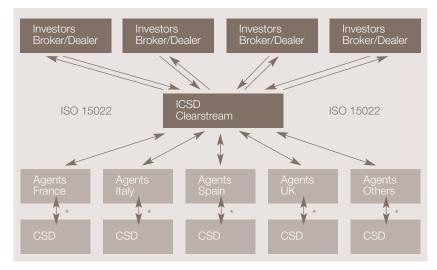
When Clearstream began the project to create its new generation processing environment in 2006, it recognised that standardising its communication with customers and providers had many benefits. This standardisation would make its interoperability strategy viable in practice at no cost to its customers. It would also offer reduced complexity, more rapid time to market and lower project cost than would have been possible without relying on standards.

By enabling straight-through processing (STP) between service providers, standards allow for effective partnering with domestic market agents without compromising service timeliness. Exploiting standards simplifies project execution by reducing the number of decision variables, and eliminates the burden of integration for new systems, because they use a common language and data attributes.

Alain Raes, Head of SWIFT EMEA, says: "We are delighted that Clearstream recognised the value of SWIFT and ISO standards and has leveraged its earlier investment in the CreationConnect connectivity suite to support the introduction of its new environment and its interoperability strategy."

"By taking advantage of SWIFT and ISO 15022, market infrastructures like Clearstream enable their customers to maximise the value of their own infrastructure investments and to reap the benefits of improved efficiency and STP."

Alain Raes, Head of SWIFT EMEA



Coverage of ISO 15022 is essential to support interoperability.

Every line that is not ISO 15022 triggers cost, complexity, inferior time to market, lower service levels and higher maintenance cost.

* Links are often ISO 15022

Clearstream interoperability

SWIFTNet

A key benefit for the market when infrastructures such as ICSDs and CSDs (Central Securities Depositories) offer connectivity via the SWIFT network is that participants can leverage one investment to support connectivity with all major counterparts.

Clearstream recognises that by allowing its customers to connect to it via SWIFTNet, financial institutions that use its services can develop once and use the resulting connectivity for many counterparts. The ICSD advocates the use of SWIFT for connectivity, to enable its customers to avoid the additional costs of using different networks to connect to different market infrastructures. It allows them to choose the most efficient provider with no migration costs.

Adds Alain Raes: "The SWIFTNet infrastructure and international standards are key to enabling the kind of efficiency improvements the marketplace is demanding. By taking advantage of SWIFT and ISO 15022, market infrastructures like Clearstream enable their customers to maximise the value of their own infrastructure investments and to reap the benefits of improved efficiency and STP."

Michael Jaeggi, Head of Product Management and Design for Core Products and Member of the Executive Management at Clearstream, comments: "If all securities market infrastructures are on the SWIFT network, then financial institutions can use the same network and the same standards to communicate with them. As part of our commitment to endorse industry standards across the board, we took the decision to support market network infrastructures such as SWIFTNet. It allows our customers to benefit from connectivity solutions that accommodate their growth or a shift in their activities without requiring them to put a new infrastructure in place."

Business background

Clearstream embarked upon the creation of a new generation processing environment to meet demand in the marketplace for improved efficiency in cross-border settlement and custody processing. Its target was to offer its customers a single window into multiple markets with service levels matching those available from a direct relationship with the best local agents.

As Philip Brown, Head of Client Relations Europe and Americas and Member of the Executive Management at Clearstream, says: "The debate about the relative merits of the integration business model versus the interoperability business model continues. But what is clear is that independent of the question about business models, all providers must support interoperability beyond their home

markets to be competitive. And adherence to industry standards like ISO 15022 is absolutely essential to achieving interoperability."

The need for interoperability is evidenced by the liquidity challenges the banks have faced during recent months, he adds. "Effective interoperability throughout the day delivers a crucial additional solution for liquidity managers, making it possible to move collateral on a same-day basis between multiple locations to meet funding requirements."

"Independent of the question about business models, all providers must support interoperability beyond their home markets to be competitive."

Philip Brown, Head of Client Relations Europe and Americas and Member of the Executive Management at Clearstream.

Clearstream's approach

Clearstream's proposition to the market is that an optimised internal environment coupled with ISO 15022 real-time messaging delivers, via an interoperability strategy, the same high service levels that can be achieved through an integration approach – but to all markets, rather than to a limited set.

Clearstream's goal is to offer domestic settlement turnaround times and instruction input deadlines that are materially as good as can be achieved given the infrastructure available in a local market.

As a basis for this proposition, Clearstream re-engineered its internal settlement to deliver fully optimised settlement in real-time from 4.00 to 18.00 CET. Permanent optimisation ensures a consistent quality of settlement feedback after consideration of all cash and securities netting opportunities, allowing flexibility to set domestic market instruction input deadlines as and when required.

Clearstream's model supports a turnaround time – receipt of an instruction, internal provisioning, validation and settlement in the local market – of 15 minutes. This allows instruction input deadlines to be 15 minutes prior to the local market deadline.

Since March 2008, Clearstream has improved more than 100 domestic market deadlines across 36 markets, extended Bridge input deadlines, introduced a new free of payment Bridge deadline and increased the number of matching and settlement exchanges with Euroclear Bank.

Beyond settlement: extending the benefits of interoperability

The interoperability that Clearstream has achieved by taking advantage of SWIFT's standards delivers benefits for its customers that go beyond settlement.

Collateral management

Effective interoperability across all major markets, combined with internal deployment of optimised real-time processing capabilities, maximises the level of trading activity that can be supported with a given pool of cash and collateral.

Collateral is the critical pillar for effective liquidity management and an increasingly scarce resource that needs to be optimised. The ability to realign positions between markets throughout the day, with timely confirmation and feedback and latest possible deadlines, permits an optimal allocation of collateral to locations where it can deliver liquidity.

Clearstream's Tri-party Repo product has also been enhanced, triggering real-time allocation and substitution of collateral. It immediately responds to new collateral moved to Clearstream and applies it for funding or substitution purposes to accelerate settlement and offer higher settlement efficiency.

Asset servicing

Clearstream's aim is to retain domestic market expertise in asset servicing that can best be offered through partnership with local agent banks. Through this partnership model, Clearstream believes it offers its customers the highest quality of service associated with unique local capabilities of the best domestic market agents. This includes timeliness of notifications and deadlines of corporate events and accuracy of pre-advised and paid coupons.

Mark Gem, Head of Business
Management and Member of the Executive
Management at Clearstream, says: "While
market usage of ISO 15022 for custody
processing is less mature than for
settlement, Clearstream demands full ISO
15022 connectivity from our agents to
realise our goals for accuracy, consistency
and timeliness in custody processing, with
a scalable model that supports business
volume growth." Clearstream adheres to
market practice guidelines around the use
of the ISO 15022 standards, ensuring
quality of messaging and maximise the
opportunities for automation.

Gem believes Clearstream has proved that use of ISO corporate actions standards is a valid strategy to improve efficiency for corporate actions processing. "Downstream, in the sub-custody space, these standards really do work," he says, "and we are committed to participating in all market initiatives that promote standardisation through the systematic use of SWIFT's corporate actions messages."

ISO 15022 messages over SWIFT have now reached the level of maturity required to support the realisation of major benefits for the financial industry. The level of market take-up of ISO 15022 over SWIFT means market participants can now introduce functional change into their infrastructures with reduced cost, complexity and time to market.

Clearstream decided to pursue a strategy of interoperability to meet the market's requirement for improved efficiency in crossborder clearing and settlement and related services.

Clearstream has reaped the benefits of SWIFT and SWIFT standards in realising this interoperability strategy, in its bid to enable new levels of efficiency for its customers in the areas of settlement, asset servicing and securities financing.

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